WHAT IS CLAIMED IS:

1. An electrophotographic developer formed of a toner and a carrier, the developer comprising:

the toner having a shape factor of 140 or less and a volume average particle size distribution GSDv of 1.3 or less; and

the electrophotographic carrier having a coat resin layer on a core material, the coat resin layer containing a conductive powder, the core material having a dynamic electric resistivity of 1 $\Omega \cdot cm$ or less under an electric field of 10^4 V/cm in a form of a magnetic brush, the conductive powder having an electric resistivity of 10^1 $\Omega \cdot cm$ or greater and $10^6 \Omega \cdot cm$ or less, and the carrier having an electric resistivity in a range between 10 and 1×10^8 $\Omega \cdot cm$, wherein

the shape factor is defined by an equation,

$$\text{Shape Factor} = (ML^2/A) \times (\pi/4) \times 100$$

wherein ML represents the absolute maximum length of the toner and A represents the projected area of the toner, and

the volume average particle size distribution GSDv is defined by an equation,

$$GSDv = (D84/D16)^{1/2}$$

wherein volume D16 represents a particle size where an accumulated volume in an accumulation distribution from smaller size reaches 16% and volume D84 represents a particle size where the accumulated volume in the accumulation distribution reaches 84%.

2. An electrophotographic developer according to Claim 1, wherein the thickness of the coat resin layer of the carrier is 0.3 μm to 5 μm.

3. An electrophotographic developer according to Claim 1, wherein the conductive powder is contained in an amount of 3 volume% to 45 volume% with respect to the coat resin layer.

4. An electrophotographic developer according to Claim 1, wherein the toner is produced through an emulsion polymerization aggregation method.

5. A method for forming an image, comprising:

a latent image processing stage for forming an electrostatic latent image on an electrostatic latent image holding member;

a developing stage for developing the electrostatic latent image using a developer;

a transfer stage for transferring a toner image formed through the development onto a transfer material; and

a fixation stage for fixing the toner image on the transfer material, wherein

the developer is an electrophotographic developer according to Claim 1.

6. A method for forming an image according to Claim 5, wherein in the latent image processing stage, an electrostatic latent image is formed on the electrostatic latent image holding member using a laser beam with a dot-concentrated type screen.

7. A method for forming an image according to Claim 5, wherein

in the latent image processing stage, when an exposing means applies an image exposure process corresponding to an image signal to form an electrostatic latent image, the image signal to be output to the exposing means is processed so that the output image signal is produced by comparing the input image signal and a threshold value matrix to which threshold values are stored in advance for determining whether or not each pixel within a screen cell comprising a plurality of pixels in a dot-concentrated type screen is to be recorded, and wherein

the threshold value matrix is a threshold value matrix in which, when a non-linear region is present in a part of the image signal-output density characteristic, linearity is improved by inserting, between threshold values of the non-linear region in the image signal-output density characteristic where the slope is large, non-recording isolated pixels which are a pixel before and a pixel after in the main scan direction of the target pixel to be switched on, the non-recoding isolated pixels being switched off.

8. A method for forming an image according to Claim 5, wherein

in the developing stage for developing the electrostatic latent image using a developer, the distance between the electrostatic latent image holding member and a developer holding member holding the developer is 350 μm or less.

9. A method for forming an image according to Claim 5, wherein

the peripheral speed of the electrostatic latent image holding member is 200 mm/sec. or greater.

10. A method for forming an image according to Claim 9, wherein the peripheral speed of the electrostatic latent image holding member is 300 mm/sec. or greater.

11. An image forming apparatus comprising:

latent image processing means for forming an electrostatic latent image on an electrostatic latent image holding member;

developing means for developing the electrostatic latent image using a developer;

transfer means for transferring a toner image formed by development onto a transfer material; and

fixation means for fixing the toner image on the transfer material, wherein

the developer is an electrophotographic developer according to Claim 1.

12. An image forming apparatus according to Claim 11, wherein the latent image processing means forms an electrostatic latent image on the electrostatic latent image holding member using a laser beam and with a dot-concentrated type screen.

13. An image forming apparatus according to Claim 11, wherein in the developing means for developing the electrostatic latent image using a developer, the distance between an electrostatic latent image holding member carrier and the developer carrier holding the developer is 350 μm or less.

14. An image forming apparatus according to Claim 11, wherein

the peripheral speed of the electrostatic latent image holding member carrier is 200 mm/sec. or greater.

15. An image forming apparatus according to Claim 14, wherein the peripheral speed of the electrostatic latent image holding member is 300 mm/sec. or greater.

16. An image forming apparatus according to Claim 11, wherein the latent image processing means processes, when exposing means applies an image exposure process corresponding to an image signal to form an electrostatic latent image, the image signal to be output to the exposing means so that the output image signal is produced by comparing the input image signal and a threshold value matrix to which threshold values are stored in advance for determining whether or not each pixel within a screen cell comprising a plurality of pixels in a dot-concentrated type screen is to be recorded, and wherein

the threshold value matrix is a threshold value matrix in which, when a non-linear region is present in a part of the image signal-output density characteristic, linearity is improved by inserting, between threshold values of the non-linear region in the image signal-output density characteristic where the slope is large, non-recording isolated pixels which are a pixel before and a pixel after in the main scan direction of the target pixel to be switched on, the non-recoding isolated pixels being switched off.